

CONSTRUCTION CLASSIFICATION: COMM vs. IBC

<i>Wisconsin Commercial Building Code</i>	<i>International Building Code</i>
Type 1: Fire Resistive – Type A	Type IA
Type 2: Fire Resistive – Type B	Type IB
Type 3: Metal Frame - Protected	Type IIA
Type 4: Heavy Timber	Type IV
Type 5A: Exterior Masonry - Protected	Type IIIA
Type 5B: Exterior Masonry - Unprotected	Type IIIB
Type 6: Metal Frame – Unprotected	Type IIB
Type 7: Wood Frame – Protected	Type VA
Type 8: Wood Frame - Unprotected	Type VB

The above chart shows a generalized conversion from the previous Wisconsin Administrative Building Code construction classification types to the approximate construction classifications in the 2000 International Building Code which most closely contain similar construction designs. Compliance with the current Wisconsin class of construction does not necessarily mean compliance with its counterpart in the above table for a new IBC class of construction. Each situation needs to be separately analyzed for compliance. The above Table is an Approximation Only.

Just as the construction classifications in Wisconsin changed in 1974 from the old classifications of fire-resistive, mill, ordinary, and frame to the ones shown at left in the above table, so now do we change again. And as in previous codes, the present code is also not retroactive. Thus if the building met the code at the time it was constructed or at the time it was changed into its present use, it is still compliant for the life of that building in that use. Alterations and additions to those buildings under a previous code must be carefully undertaken to permit the untouched areas to remain in compliance with the code at the time they were constructed, while meeting all of the present code requirements for those areas altered or affected by the addition. In some cases, a fire division wall per IBC section 705 may be necessary to separate an addition from the original building.

The 2000 IBC chapter 6 does have some differences in materials not permitted in certain classifications and certain allowances for materials in other classifications. There is also an extensive list of exceptions to allow some combustible materials in noncombustible Types I & II constructions and a much longer description of acceptable Type IV heavy timber materials.

Building designers and code officials should refer to IBC Section 602 and Table 601 for the minimum construction requirements to determine the classification of construction of a building.

A couple significant points include:

- IBC Type IIB, unprotected steel construction, does **not** permit the substitution of 1-hour combustible construction.
- IBC Types IIIA and IIIB do not require 6" of exterior masonry, but they do often require rated NC (noncombustible) or FRTW (fire-retardant treated wood) framed exterior walls.
- Although Heavy Timber construction is numbered IBC Type IV, similar as under the previous WI code, there are major differences of noncombustible exterior walls and no concealed structural spaces are permitted (1 exception).
- Most typical pole buildings are likely to be IBC Type VB. However, a pole building with fire-retardant treated girts and noncombustible siding, when it is at least 30' to property lines may meet IBC Type IIIB classification.

If, after reading IBC Section 602, you still have a question with what materials are allowed for a specific building construction type, please contact a building plan examiner with your question. You may also E-mail your question to bldgtech@commerce.state.wi.us or FAX your question to a building plan examiner in one of our six full service offices. The full list of plan examiners is found in the Building Plan Submittal Kit or in the Wisconsin Construction Codes Report publications or else may be located on our web site at www.commerce.state.wi.us/SB/SB-HomePage.html. Choose the selection **Programs** from the toolbar at the left side, next choose by clicking on the arrow next to the choice **Commercial Buildings**, and scrolling down to click the choice of **Commercial Building Plan Reviewers**.